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LG

# AC Smart Advanced Control Smart *Quick Guide*

**PQCSW320A0E**

ENGLISH

ITALIANO

ESPAÑOL

FRANÇAIS

DEUTSCH

## Note

- Please read this installation/use manual before installing the product.
- Install the product with an expert installation engineer with proper qualifications.
- Even after reading this manual, please store this manual so that you can refer to it during operations.

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## Quick Guide and Installation/Operation Manual Guide

This manual (Quick Guide) summarizes and describes important information for the user to use AC Smart effectively. For detail information related to the installation and use of AC Smart, refer to the installation/user manual included in the CD provided.

## Safety Precautions

To prevent injury to the user or other people and property damage, the following instructions must be followed.

- Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.



### **WARNING**

This symbol indicates the possibility of death or serious injury.

### **CAUTION**

This symbol indicates the possibility of injury or damage.

- Meanings of symbols used in this manual are as shown below.

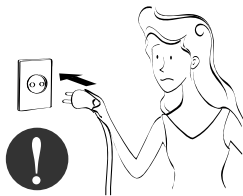
	<b>Be sure not to do.</b>
	<b>Be sure to follow the instruction.</b>

## **WARNING**

### ■ Operation

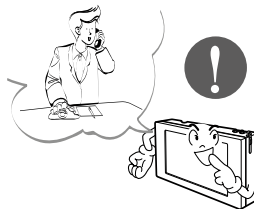
**Do not operate or stop the unit by inserting or pulling out the power plug.**

- It will cause electric shock or fire due to heat generation.



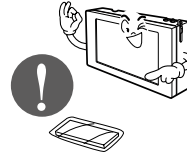
**Ask for Product equipment at the service center or establishment certainly at the specialty store.**

- It can cause an accident, electric shock, explosion or injury.



**Use standard parts.**

- Use of non standard parts can cause electric shock, explosion, injury, breakdown.



Standard part

## Safety Precautions

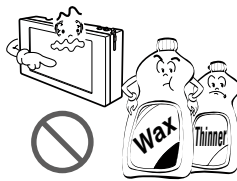
**While re-installing the established product, notify the service center or establishment specialty store**

- It can cause an accident, electric shock, explosion, injury.shock.



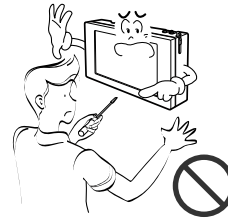
**Do not use the power cord near Flammable gas or combustibles, such as gasoline, benzene, thinner, etc.**

- It may cause an explosion or fire.



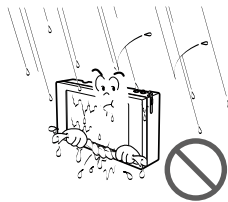
**Do not disjoint randomly or repair and remodel the product.**

- It may cause fire and electric shock.



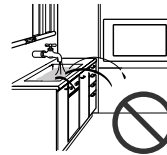
**If water enters the product, turn the power switch of the main body of appliance off.**

- After taking the power-plug out from the socket, contact the service center.



**Keep the product away from the places which can have moisture.**

- Water may enter the unit and degrade the insulation. It may cause an electric shock.



## ■ During usage

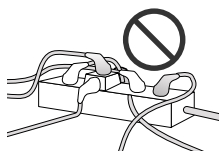
**Do not change or extend the conductor at random.**

- It can cause fire and electric shock.



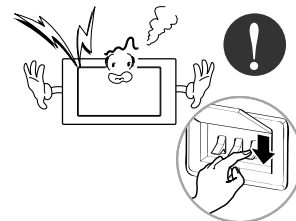
**Do not use concert with in the octopus-like legs way.**

- It can cause fire and electric shock.



**Unplug the unit if strange sounds, smell, or smoke comes from it.**

- It may cause fire and electric shock accident.



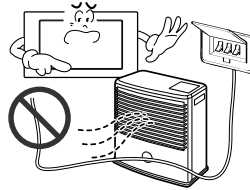
**Do not put firearms near product.**

- It can cause fire.



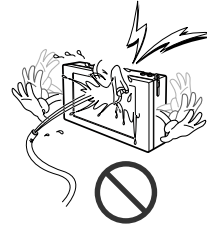
**Do not put an electric heater or conductor near to the product.**

- It can cause fire and electric shock.



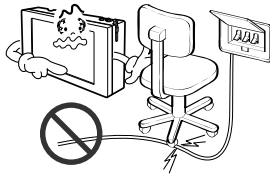
**Do not spill water inside product.**

- It can cause electric shock and breakdown.



**Do not place heavy goods on wire.**

- It can cause fire and electric shock.



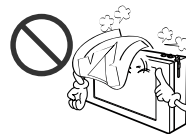
**Hold the plug by the head of the power plug when taking it out.**

- It may cause electric shock and damage.



**Do not place heavy goods on product.**

- It can cause product breakdown.



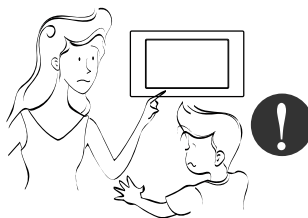
**That increase in case of product was been flood certainly in the service center or establishment specialty store commit .**

- I am responsible for fire and electric shock.



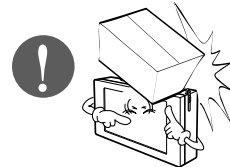
**Protect the product from handling by a children.**

- It can cause accident and product breakdown.



**Do not apply shock to product.**

- I am responsible for breakdown in case of shock to product.



## ⚠ CAUTION

### ■ During usage

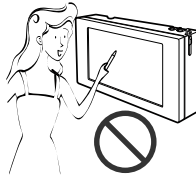
**Clean by soft hands using a cleaning material like a soft cloth.**

- It can result in fire and product transformation.



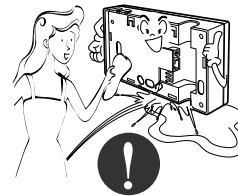
**Use touch screen with a pen that product offers.**

- Otherwise, there can be breakdown and damage to the product.



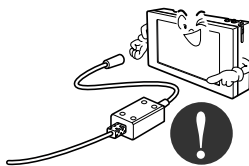
**Do not place any live part on the surface having water.**

- It can cause product breakdown.



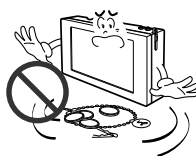
**Use recommended Adapter.**

- Otherwise it can result in product breakdown



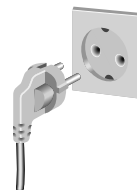
**Avoid contact to the metallic goods such as necklace, coin, key, a watch which may touch the battery even for a short-time.**

- It may cause product breakdown and injury.



**Hold the plug by the head of the power plug when taking it out.**

- It may cause electric shock and damage.



## Introduction of AC Smart

AC Smart is a central controller that can manage maximum of 64 air condition indoor units individually or as a group. Also when you connect the AC Smart expansion kit, you can expand up to 128 units. With AC Smart, you can monitor or operate the air conditioner and ventilator installed in each room of the building from a location such as the management office of a building or administrative office of a school.

### AC Smart characteristics

The characteristics of AC Smart are as follows.

#### Individual and integrated operation & monitoring

AC Smart can control and monitor the following items of the installed air conditioners by selecting individually, group or all.

- Operating status, operating mode, fan level, fan direction, lock, set temperature, individual lock, temperature range.

#### Group management

AC Smart can control and manage the installed air conditioner conveniently and intuitively by Zone and Group according to the type and location of the units.

#### Management cost reduction

The administrator can control all the functions from the management office through AC Smart. Therefore all the air conditioners can be easily managed by one administrator.

#### Scheduled automatic operation management & energy saving

AC Smart can automatically operate the air conditioner through the schedule. You can reduce unnecessary operation of the air conditioner through this schedule function and save energy effectively.

#### Various automatic control functions

AC Smart provides various control functions such as Automatic switch operation, Temperature limit operation, Time limit operation etc. You can execute and manage the functionality of maintaining the temperature to a certain level or limit the operating time of the air conditioner etc.

#### Expanded operation function

AC Smart provides expansion interface function of controlling the air conditioner interfacing with other devices. When you use the expansion interface function, you can control maximum of 128 units of air conditioners.

## Web server and E-mail notification function

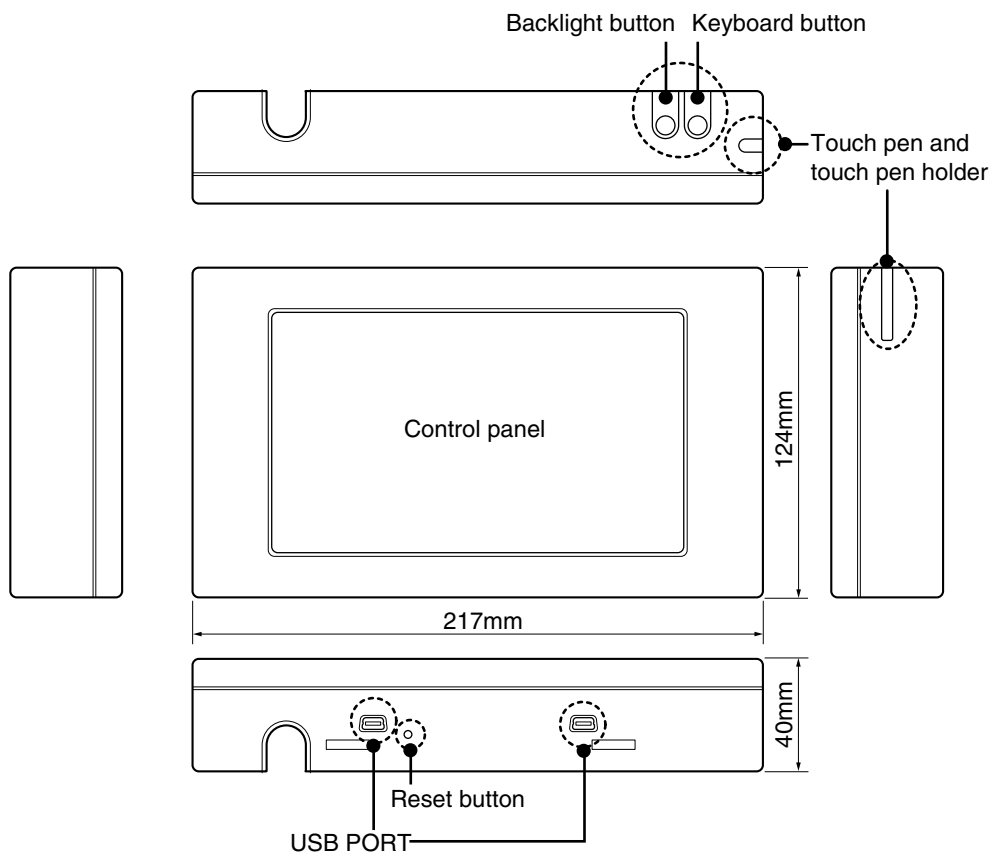
AC Smart provides a web server function for the administrator to control the air conditioner by accessing the AC Smart remotely through the network. Also it provides the E-mail notification function to notify the error to the administrator located remotely via E-mail.

## Backup and upgrade function

AC Smart provides the backup and recovery function of the key database for stability of the system. Also it provides a function to upgrade the software to the latest version.

### AC Smart exterior

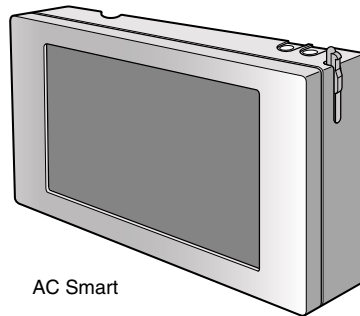
AC Smart is composed as follows.



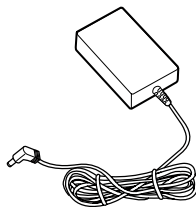


## AC Smart component

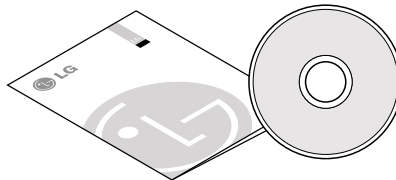
The components of AC Smart are as follows inside the box. Open the box of AC Smart and check whether all components are included.



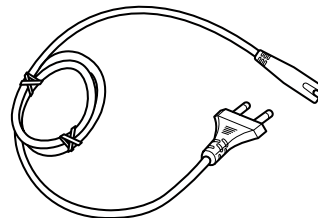
AC Smart



Power adapter



Quick Guide &amp; Manual CD



Power cord

## AC Smart product specification

The product specification of AC Smart is as follows.

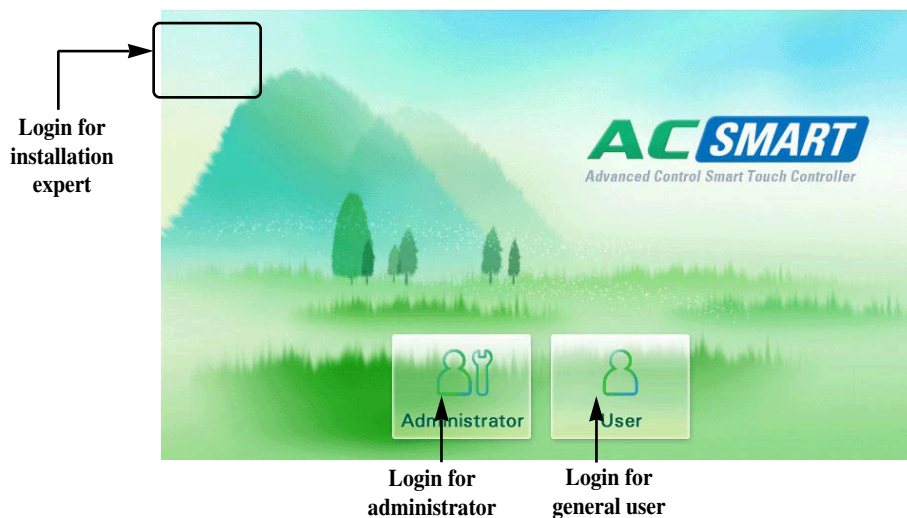
Item	Specification
CPU	VRender3D VR3611F 32bit RISC microprocessor
Memory	DDR-SDRAM 128MB (32MB x 4ea)
Boot ROM & Storage	NAND Flash 256MB
LCD	7.0" WVGA (800 x 480) TFT LCD
UART	<ul style="list-style-type: none"> <li>• COM1: RS-232 port (on_boarding 4-wire touch controller)</li> <li>• COM2: RS-485 port (communication)</li> </ul>
USB	<ul style="list-style-type: none"> <li>• One USB 1.1 Host port (use USB Flash)</li> <li>• One USB 2.0 Device port (use ActiveSync)</li> </ul>
Buzzer	BST-0843A
DI	S/W Input
Power	DC 12V (5V/3A, 3.3V/2A, 2.5V/2A, 1.8V/2A)
Touch Screen	4-wire, touch controller on_boarding
OS	Windows CE 5.0 core License

## About AC Smart

This chapter describes how to log in to AC Smart and the functional menu of AC Smart.

### Logging on to AC Smart

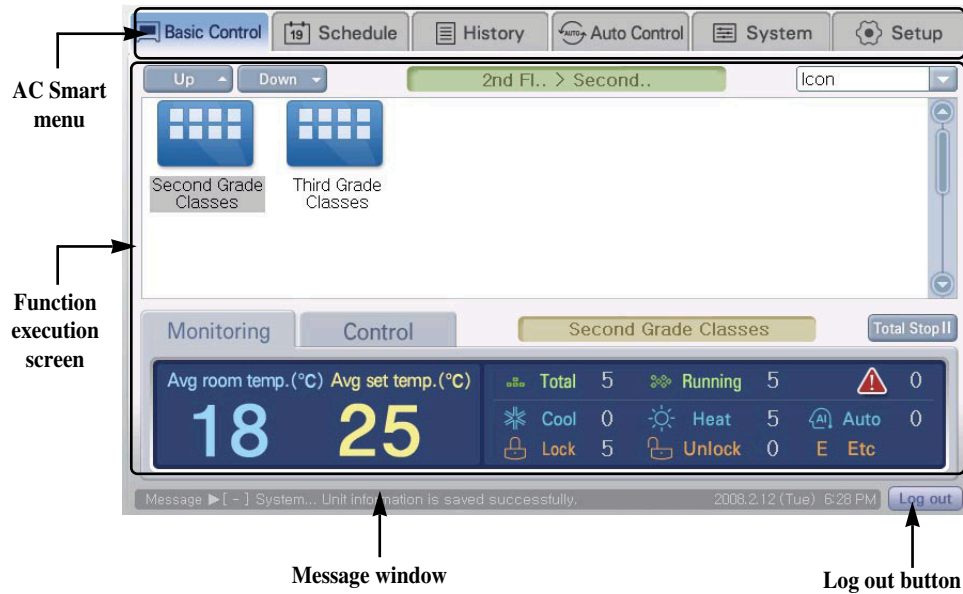
When you turn on the power of AC Smart, the following log in screen will be displayed. You can log in as installation expert, administrator and general user to AC Smart.



- **Login for installation expert:** When you press the top left corner for 5 seconds, a window to enter the password will be displayed. It is recommended for only the installation expert of AC Smart to log in and the installation expert will be able to use the additional menu related to the installation. The password is 'digital21'.
- **Login for administrator:** When you press the 'Administrator' button, a window to enter the password will be displayed. It is recommended for only the administrator who manages the indoor unit and ventilator using AC Smart to log in, and the administrator will be able to use various menus excluding menu related to the installation. There is no default password.
- **Login for general user:** When you press the 'General user' button, you can log in without entering the password. General user of AC Smart can use this log in to use only the 'Control/Monitoring' menu that can monitor indoor unit status and control the indoor unit.

## About AC Smart screen composition

When you log in to AC Smart, the following screen will be displayed.



### AC Smart menu

This displays the menu for the function provided by AC Smart. When you log in as the general user you can only select the 'Control/Monitoring' menu.

### Function execution screen

You can operate the function for each menu from the Function execution screen.

### Message window

Message window notifies the user of various types of information depending on the functional operation and status of AC Smart.

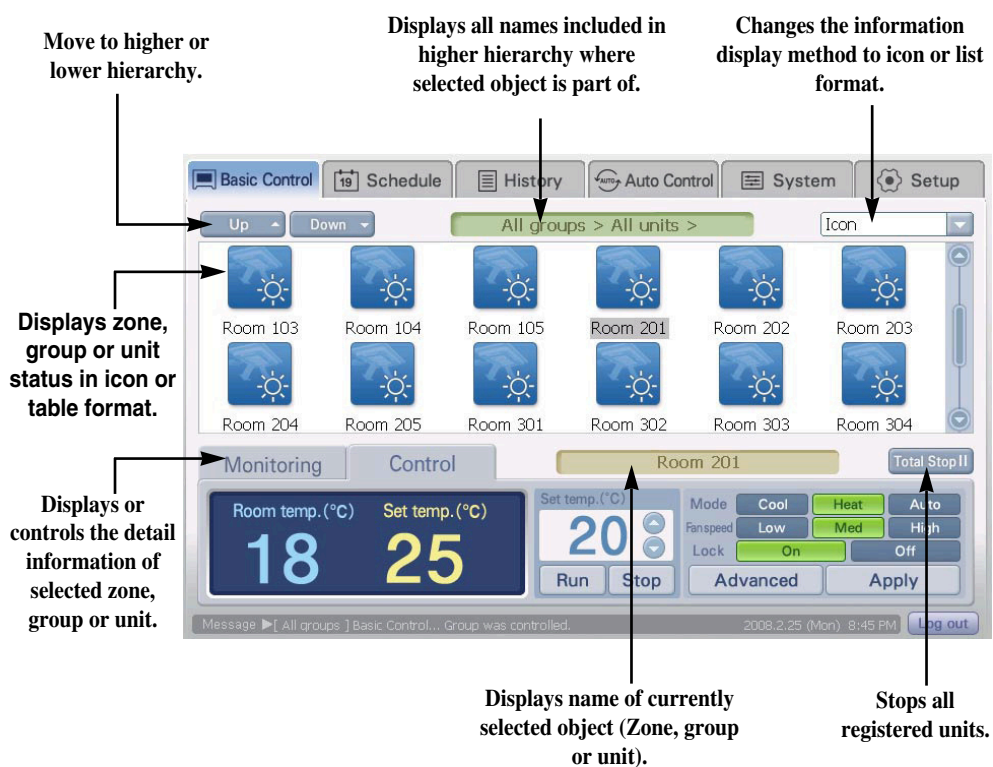
### Log out button

When you press the log out button, you will log out from AC Smart and return to the log in screen.

## About control/monitoring menu

Control/Monitoring menu is the menu to easily manage various units (Indoor units, ventilator) in one unit that can be commonly controlled. You can monitor or control the status information from Control/Monitoring menu in Zone, Group or Unit.

Control/Monitoring menu screen is composed as follows.



## ■ Zone, group and unit status display

### Status display of zone, group and unit

Control/Monitoring menu displays the status of Zone, Group or Unit (Indoor unit, ventilator) through the following icons.

Status	Icon			
	Zone	Group	Indoor unit	Ventilator
Normal operation				
Alarm				
Not in operation				

### Operating mode display of indoor unit and ventilator

The current operating mode of the indoor unit and ventilator is displayed through the icons as follows.

Unit type	Icon	Description	Icon	Description	Icon	Description
Indoor unit		Cool mode		Fan mode		Cool mode
		Auto mode		Dehumidifier mode	-	-
Ventilator		Heat mode		Auto mode		General mode

### List type display of zone, group and unit information

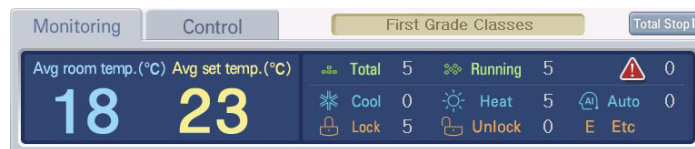
Information of Zone, Group and Unit is basically displayed as an Icon. But when you change the 'Icon' from the combo box on the top right corner to 'List' or 'Detail list', you can switch the view from Icon to List format.

## ■ Zone, group and unit monitoring and control

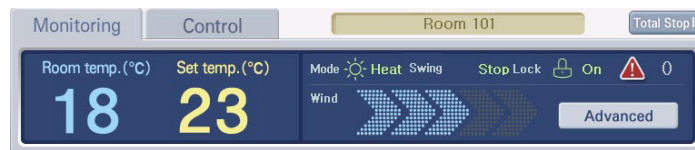
### Monitoring information display of zone and group

There is the 'Monitoring' tab on the bottom of the Control/Monitoring menu. Monitoring tab displays the detail information of the selected Zone, Group or Unit.

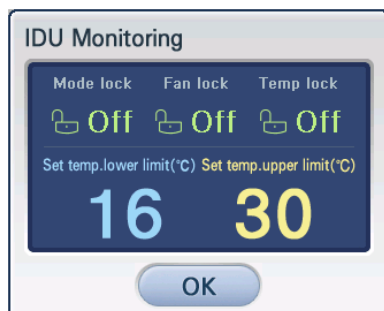
The monitoring information of the Zone or Group is differently displayed as the monitoring information of the Unit. For the monitoring information of the Zone or Group, the average temperature and number of units according to the status of the unit included in the applicable Zone or Group are displayed. On the other hand, for the monitoring information of the unit, the setting and operating status of the applicable unit are displayed.



<Monitoring tab for zone and group>



<Monitoring tab for unit>



<Monitoring tab>

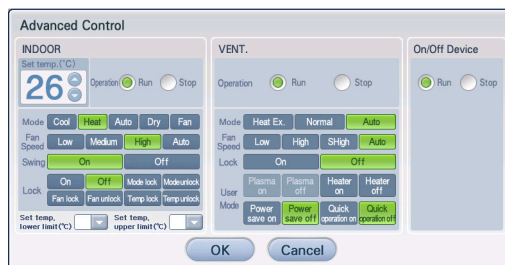
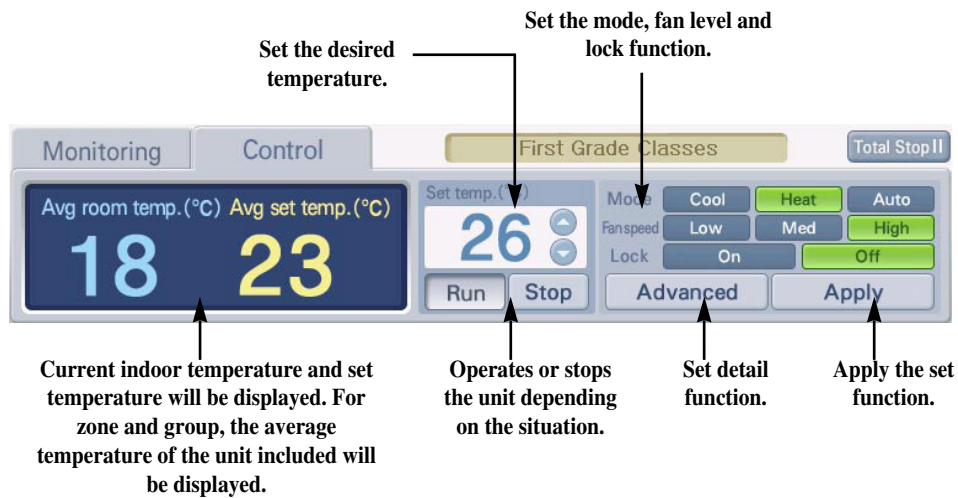
In the monitoring tab of the unit, you can see the more detailed information of the unit.

When you press the [Detail] button, the monitoring window showing the detail information of the unit will be displayed as shown in the left picture.

### Zone, group unit control

There is a 'Control' tab located at the bottom of the Control/Monitoring menu. You can directly control the Zone, Group or Unit from the Control tab.

You can set the desired indoor temperature the from the Control tab and execute/stop the operation of the unit (Indoor unit, ventilator). Also you can set and apply the setting of mode, fan level, fan and lock function.



<Monitoring window>

When you press the detail button, you can see the detail control window as shown on the left picture. In the detail control, you can set the detail function of the indoor unit and ventilator besides mode, fan level and lock function. Also you can set the function to turn On/Off the device connected to AC Smart.

## About schedule menu

Schedule is the function to execute the operation at a preset time by setting the operation of the unit (Indoor unit and ventilator) beforehand. You can set the schedule of the unit in Group from the schedule menu.

In the schedule menu, you can designate and set the following items.

- Schedule group: Group of units (Indoor unit, ventilator) to apply the same schedule
- Schedule pattern: Unit to designate a certain operation (Event) of the air conditioner on a weekly or daily basis

The following picture shows a schedule menu to set the schedule. You can select '1. Select group', '2. Apply weekly pattern' and '3. Edit/Save set schedule' in the order of the numbers displayed to designate a schedule.

Designate the schedule pattern and application period. You can create and edit the schedule pattern by clicking on the [Edit] button.

Displays the applied schedule pattern. You can directly edit, copy save and reset.

Basic Control | **Schedule** | History | Auto Control | System | Setup

**1. Select Group**  
Name  
Classes facing north  
Classes facing south  
[Edit]

**2. Apply Weekly pattern**  
Select weekly pattern  
[ ] [Edit]  
Select date for period application  
Start date [ ] [ ]  
End date [ ] [ ]  
Apply weekly schedule  
Period  
2008.07.25 ~ 2008.08.29  
[Add] [Delete]

**3. Edit schedule & save**  
2008.08.17~2008.08.23  
Sun Mon Tue Wed Thu Fri Sat  
07:00  
08:00  
09:00  
10:00  
11:00  
[Edit] [Copy] [Save] [Initialize]

Message ▶ [ Admin. Office ] [Code 242] Error Code 2008.2.12 (Tue) 6:43 PM [Log out]

List of schedule group is displayed.  
You can create, edit or delete the schedule group by clicking the [Edit] button.

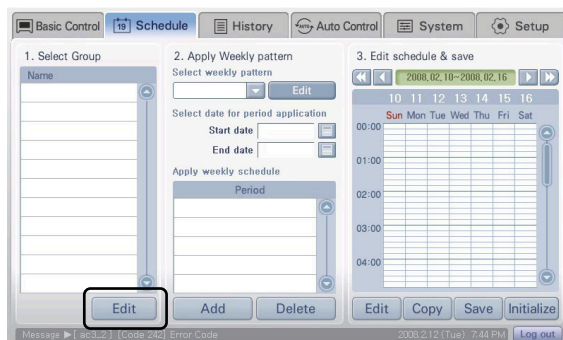


## Schedule setting example

This chapter describes how to create the schedule group and weekly pattern and how to create the schedule assuming that you have installed AC Smart.

### Schedule group creation

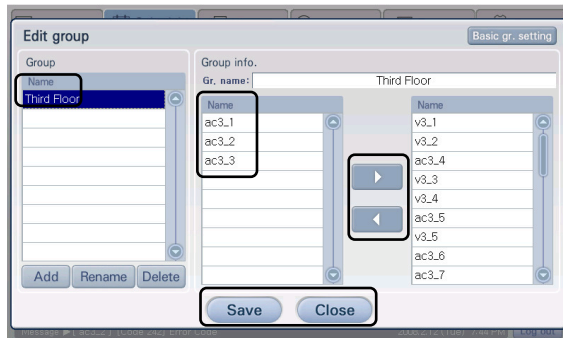
To set the schedule after installing AC Smart, you must first create a schedule group. Here we will describe an example where a group called '3rd floor' is created and units 'ac3\_1', 'ac3\_2' and 'ac3\_3' are assigned.



1. When you select the 'Schedule' menu from the menu of AC Smart, the schedule screen will be displayed as shown on the left side. Press the [Edit] button under '1. Select group'.



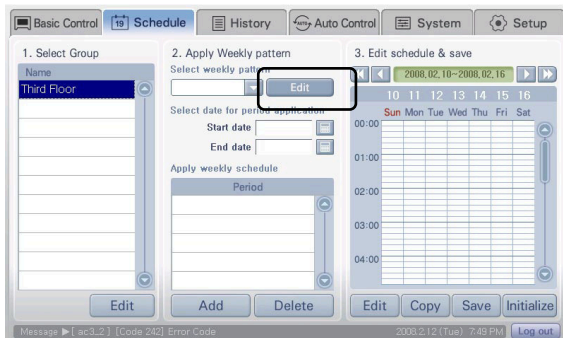
2. Group edit screen will be displayed. Press the [Add] button to enter the name of the group to create. In this example, enter '3rd floor'.
3. Press the [OK] button.



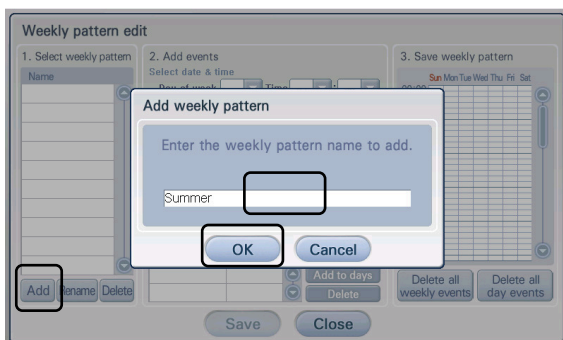
4. Designate the group and press the [ ► ] and [ ◀ ] button to change the composition of the unit. At this time, assign 'ac3\_1', 'ac3\_2' and 'ac3\_3' units to group named '3rd floor'.
5. Press the [Save] button to save the current setting.
6. Lastly, press the [Close] button to return to the previous screen.

## Weekly pattern creation

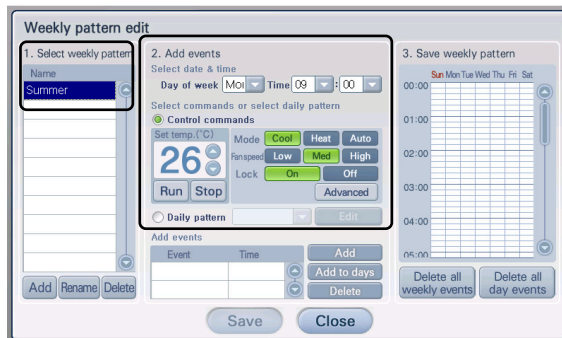
When the schedule group is created, then you must set the weekly schedule pattern. Here, we will describe an example of creating a pattern named 'Summer'.



1. Press the [Edit] button under '2. Apply weekly pattern'.  
Apply weekly pattern'.

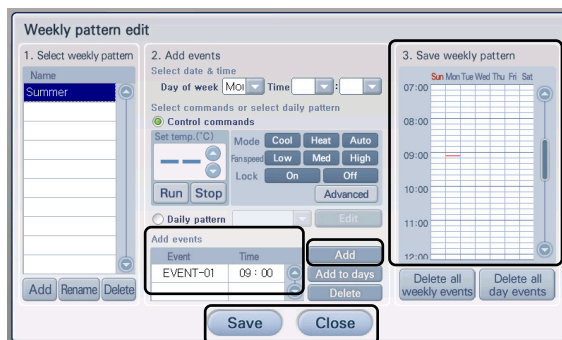


2. When the weekly pattern edit screen is displayed, press the [Add] button located under '1. Select weekly pattern' to create the new weekly pattern.
3. Enter the name of the pattern to create and press the [OK] button. Here, enter the name 'Summer'.



4. Designate the Group to set the schedule from '1. Select the weekly pattern'. Here, 'Summer' is designated as weekly pattern..

5. Designate the time and operation of the event from '2. Add event'. You can use the control command or apply the daily pattern to the applicable dates for the operation. Here, we will select and apply the control command.



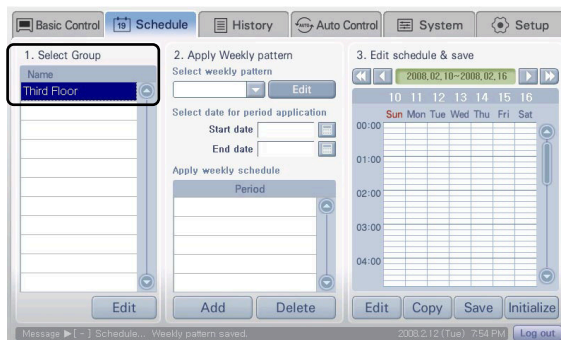
6. Click on the [Add] button. The set event will be added and displayed. The saving event will be displayed in read for the applicable day and time in '3. Save weekly pattern'. When you press the applicable event, you can check the set event.

7. Repeat step 4 and 6 to enter all the events of the planned weekly pattern.

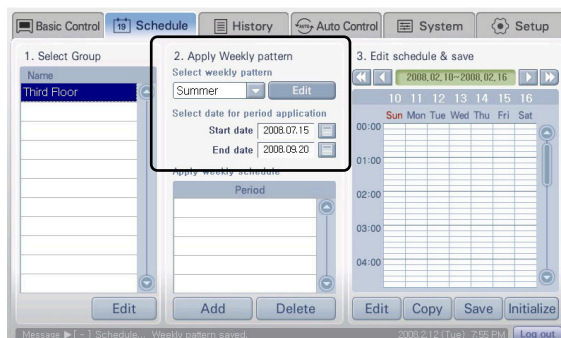
8. When you have entered all the events, press the [Save] button to save the weekly pattern. Then press the [Close] button to return to the previous screen.

## Schedule creation

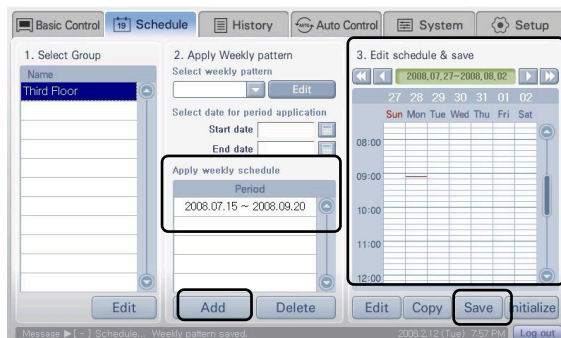
When you have created the schedule group and weekly pattern, lastly you must set the period to apply using based on the group and weekly pattern. Here we will describe an example of completing the schedule setting using the schedule group, '3rd floor', and weekly pattern, 'Summer'.



1. Select the group to apply the schedule from '1. Select group'. Here select the schedule group named '3rd floor'.



2. Select the weekly pattern to apply from '2. Apply weekly pattern', and set the period to apply using the calendar icon. Here, we set the period of '2008.07.15~2008.09.20' to the weekly pattern named 'Summer'.



3. Click on the [Add] button. The set period will be displayed on the weekly schedule application and the applicable schedule will be displayed in '3. Edit and save schedule'.
4. Press the [Save] button to apply the current setting. This completes the schedule setting.

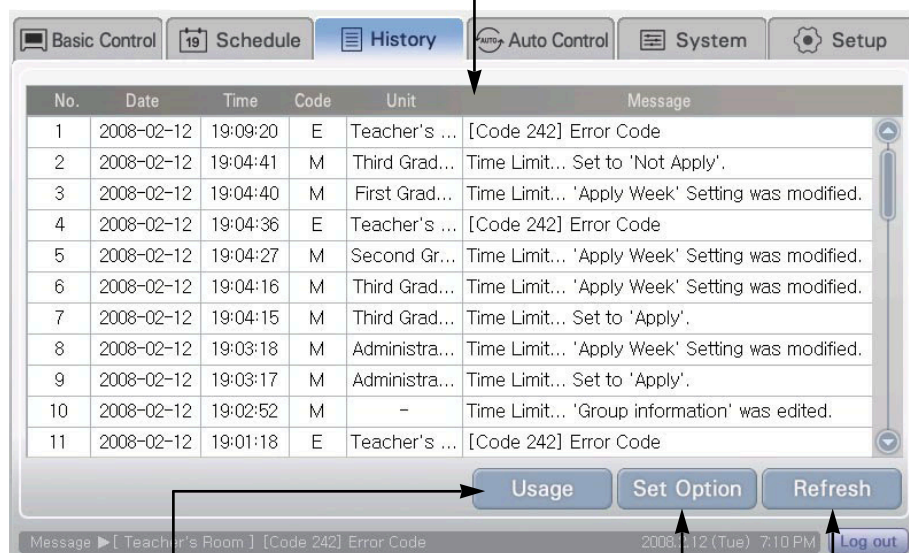
## About record menu

When there is a change in status of the unit (Indoor unit and ventilator) interfacing with AC Smart through the network or in set status of AC Smart, AC Smart records the applicable information. You can categorize or view the change records by type or period from the record menu.

You can view the operating time and average temperature by unit (Zone, Group or Unit) or period of each unit from the record menu.

When you select the record menu, the following screen will be displayed.

**Displays occurred time, unit and content of the record in the latest order in a table format.**



**You can check the usage information such as operating time and average temperature of each unit (Group, zone, unit).**

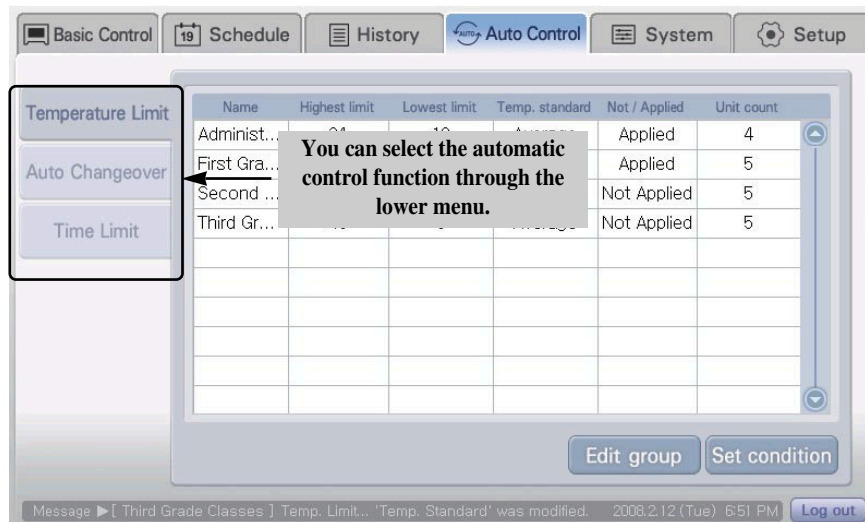
**You can categorize and view the record by period or type.**

**You can review the latest record by refreshing the data.**

## About automatic control menu

You can automatically control the indoor unit and ventilator interfacing with AC Smart according to the temperature and time. Automatic control menu provides the following 3 functions.

- Temperature limit operation: Function to set the upper and lower temperature and maintain the indoor temperature within the set temperature range
- Automatic switch operation: Function to automatically switch the operating mode (Cool, heat) to maintain the optimal indoor temperature
- Time limit operation: Function to limit the operating time within a specific time for the indoor unit and ventilator to minimize the energy consumption



For the automatic control menu, you can create and apply a separate group for each operating function. Also you can create the same group as the designated group from the 'System setting' menu to apply the function.

## ■ Temperature limit operation

Temperature limit operation is the function to maintain the indoor temperature within a certain range. When you set the upper temperature, lower temperature and temperature criteria in the temperature limit operation, you can operate the stopped indoor unit in cool mode or heat mode depending on the indoor temperature.

The group and setting of temperature limit operation are displayed in table format.

Name	Highest limit	Lowest limit	Temp. standard	Not / Applied	Unit count
Administ...	34	10	Average	Applied	4
First Gra...	40	5	Fixed	Applied	5
Second ...	34	12	Fixed	Applied	5
Third Gr...	40	5	Average	Not Applied	5

You can create, edit or delete the group to apply temperature limit operation.

You can set the condition for temperature limit operation.

### Edit temperature limit group

<Temperature limit operation group edit screen>

When you press the [Edit group] button, 'Edit group' screen to create, edit or delete the group for Temperature limit operation is displayed as shown on the left picture.

In the 'Group', you can add a new group or delete/rename the existing group.

In the 'Group information', use the [ ► ] or [ ◀ ] button to add the unit to or remove the unit from the group.

When you press the [Default group setting] button, you can automatically create the group according to the group and unit setting set in the 'System setting' menu without creating the Temperature limit operation group separately.

## Temperature limit condition setting

When you press the [Condition setting] button, the 'Condition setting' screen to set the Temperature limit operation function and related items will be displayed as shown in the left picture.

Designate the Temperature limit operation group and set the item for Temperature limit operation, and then press the [Save] button to set the Temperature limit operation function to the applicable group.

### <Temperature limit operating condition setting screen>

Refer to the following table for the description on the items to set the Temperature limit operation.

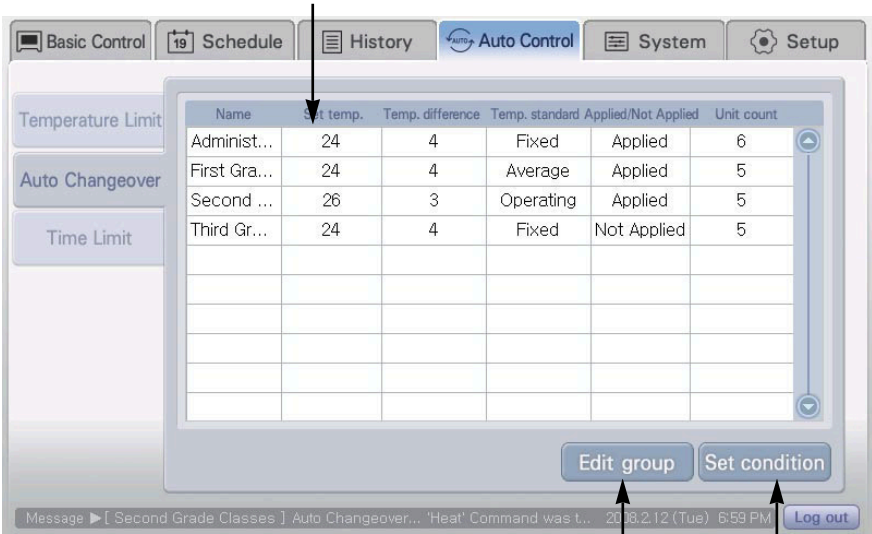
Item	Description
Upper limit temperature	Set the maximum temperature permitted as indoor temperature.
Lower limit temperature	Set the minimum temperature permitted as indoor temperature.
Temperature criteria	<p>Select the method to measure the indoor temperature. You can select one of the two methods to measure the indoor temperature.</p> <ul style="list-style-type: none"> <li>- Average all units: Method of operating the Temperature limit operation function by using the average of the temperature from indoor units detected within the group</li> <li>- Fixed: Method of operating the Temperature limit operation function according to the temperature detected based on the criteria of the indoor unit registered first within the group</li> </ul>
Apply/Not apply	<p>Set whether to execute or not execute the Temperature limit operation.</p> <ul style="list-style-type: none"> <li>- Apply: Execute the Temperature limit operation function</li> <li>- Not apply: Not execute the Temperature limit operation function</li> </ul>



Automatic switch operation

Automatic switch operation is the function to automatically switch the operating mode (Cool/Heat) of the air conditioner according to set temperature and range. That is, when the current temperature is more than lower than the set temperature range base don the criteria, it will operate the Heat mode to maintain the temperature within the set range. On the other hand, when the current temperature is more than higher than the set temperature range, it will operate the Cool mode to maintain the temperature within the set range.

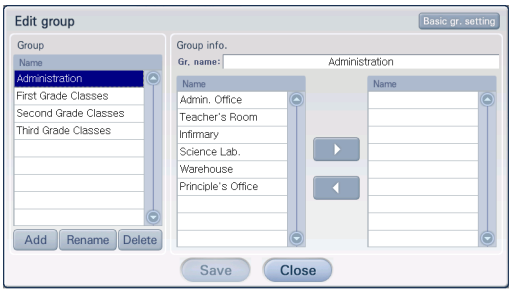
The group and setting of automatic switch operation are displayed in table format.



You can create, edit or delete the group to apply automatic switch operation.

You can set the condition for automatic switch operation.

Edit automatic switch operation group

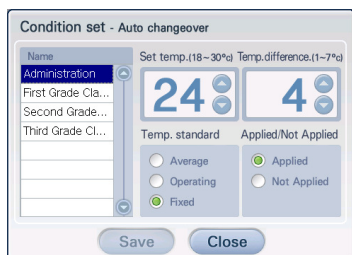


<Automatic switch operation group edit screen>

When you press the [Edit group] button, 'Edit group' screen to create, edit or delete the group for Automatic switch operation is displayed as shown on the left picture. In the 'Group', you can add a new group or delete/rename the existing group. In the 'Group information', use the [ > ] or [ < ] button to add the unit to or remove the unit from the group.

When you press the [Default group setting] button, you can automatically create the group according to the group and unit setting set in the 'System setting' menu without creating the Temperature limit operation group separately.

## Automatic switch operation condition setting



When you press the [Condition setting] button, the 'Condition setting' screen to set the Automatic switch operation function and related items will be displayed as shown in the left picture.

Designate the Automatic switch operation group and set the item for Automatic switch operation, and then press the [Save] button to set the Automatic switch operation function to the applicable group.

### <Temperature limit operating condition setting screen>

Refer to the following table for the description on the items to set the Automatic switch operation.

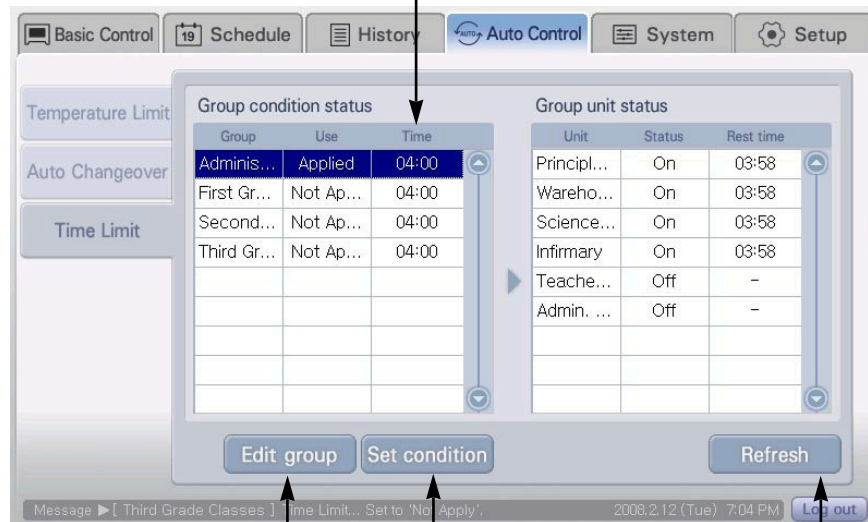
Item	Description
Temperature setting	Set the criteria temperature to automatically switch the temperature.
Temperature difference	Select the temperature difference for Automatic switch operation to operate. When the difference between the current indoor temperature and criteria temperature is higher than or lower than this temperature difference, the operating mode of the indoor unit will automatically switch.
Temperature criteria	Select the method to measure the indoor temperature. You can select one of the three methods to measure the indoor temperature. <ul style="list-style-type: none"> <li>- Average all units: Method of operating the Automatic switch operation function by using the average of the temperature from indoor units detected within the group</li> <li>- Average all operating units: Method of operating the Automatic switch operation function by using the average of the temperature from operating indoor units within the group</li> <li>- Fixed: Method of operating the Automatic switch operation function according to the temperature detected based on the criteria of the indoor unit registered first within the group</li> </ul>
Apply/Not apply	Set whether to execute or not execute the Automatic switch operation. <ul style="list-style-type: none"> <li>- Apply: Execute the Automatic switch operation function</li> <li>- Not apply: Not execute the Automatic switch operation function</li> </ul>

## ■ Time limit operation

Time limit operation is the function to limit the using time of the indoor unit and ventilator individually by the user. When the indoor unit and ventilator operate for more than the time set for the day in Time limit operation, the operation will automatically stop.

For example, when the administrator is not available during the weekend and the user turns on the indoor unit and ventilator, this function can enable the user to minimize waste of unnecessary energy by automatically turning the indoor unit and ventilator off after a certain period of time even when the user leaves without turning the indoor unit and ventilator off. When the indoor unit and ventilator are turned off, the user can turn them on again to use them.

The group, unit and setting of time limit operation are displayed in table format.



You can create, edit or delete the group to apply time limit operation.

You can set the condition for time limit operation.

You can review the set group and unit operating time of time limit operation in latest information by refreshing the data.

## Edit time limit operation group

**<Temperature limit operation group edit screen>**

When you press the [Edit group] button, 'Edit group' screen to create, edit or delete the group for Time limit operation is displayed as shown on the left picture.

In the 'Group', you can add a new group or delete/rename the existing group.

In the 'Group information', use the [ ▶ ] or [ ◀ ] button to add the unit to or remove the unit from the group.

When you press the [Default group setting] button, you can automatically create the group according to the group and unit setting set in the 'System setting' menu without creating the Time limit operation group separately.

## Time limit operation condition setting

**<Time limit operation condition setting screen>**

When you press the [Condition setting] button, the 'Condition setting' screen to set the Time limit operation function and related items will be displayed as shown in the left picture.

Designate the Time limit operation group and set the item for Time limit operation, and then press the [Save] button to set the Time limit operation function to the applicable group.

Refer to the following table for the description on the items to set the Time limit operation.

Item	Description
Apply/Not apply	Set whether to execute or not execute the Time limit operation. - Apply: Execute the Time limit operation function - Not apply: Not execute the Time limit operation function
Operation limit time	Set the time interval to automatically end the indoor unit and ventilator.
Applicable day	Set the day to operate the Time limit operation function.

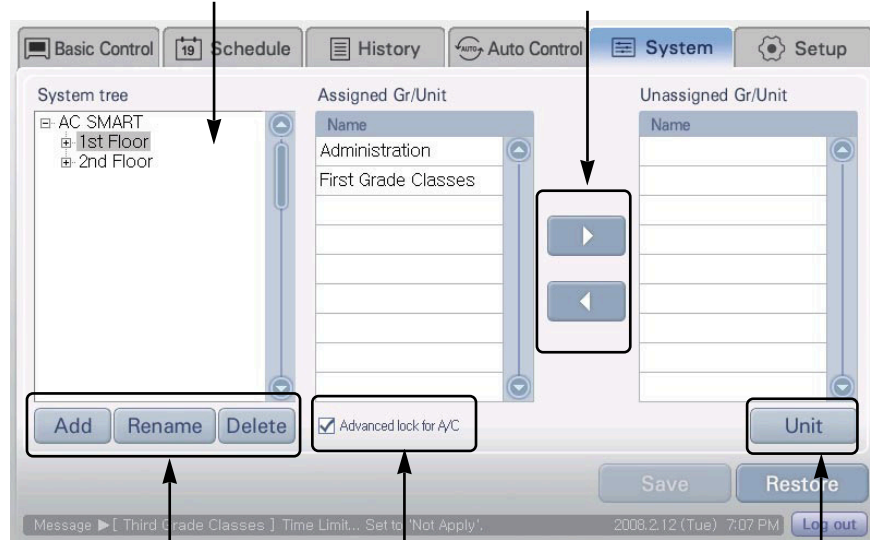
## About system setting menu

You can conveniently manage the units (Indoor unit and ventilator) with AC Smart according to the installed location or functional characteristics in Zone or Group. The system setting menu provides function to include or exclude these indoor units or ventilators to or from the Group or Zone according to the physical structure and logical structure.

The user and administrator will operate AC Smart from the 'Control/Monitoring' menu based on the configuration of Zone, Group and Unit set from this menu.

Zone and group are displayed in tree format. Press the [Add], [Rename] or [Delete] button to add, rename or delete the zone or group.

Registered or unregistered groups or units will be displayed. You can press the [▶] or [◀] button to change the setting.



You can add, rename or delete the zone or group.

When the indoor unit or the ventilator supports detail lock function, you can set whether to use this function.

You can add a new unit or or edit/delete the existing unit.

### Reference: Function limit according to log in authority

'Detail lock model' open and [Unit management] button are only displayed when logged on as installation expert mode. Therefore the general user and administrator cannot use this function.

## Unit management (Unit registration, On/Off device registration, control interface setting)

When you click on the [Unit management] button located below the system setting menu, the following 'Unit management' screen will be displayed. In the unit management menu, you can register a newly connected unit or edit/delete the unit of an existing Zone. Also you can automatically register the unit through the unit search.

You can enter the information of the indoor unit, ventilator or On/Off device to register or edit.

You can interface with external central controllers. You can also interface with other AC Smart to control maximum of 128 units.

**Unit Management**

Type: ☒ Air conditioner ☐ Ventilator ☐ On/Off Device

Name: (Max. 20 characters) (up to 2 digits 00 ~ FF) (Max. 20 characters)

Address: (Max. 20 characters)

Model: (Max. 20 characters)

Capacity: (up to 5 digits)

Product type	Name	Address	Model	Capacity
A/C	Admin. Office	24	4 Way	8000
A/C	Teacher's Room	02	4 Way	8000
A/C	Infirmary	03	4 Way	8000
A/C	Science Lab.	04	4 Way	8000
A/C	Room 101	05	4 Way	8000
A/C	Room 102	06	4 Way	8000
A/C	Room 103	07	4 Way	8000

Control link

Auto

Add

Delete

Modify

OK

Cancel

The following information must be entered to register the unit.

Item	Description
Product type	Select the type of unit (Air conditioner, ventilator, On/Off device).
Name	Enter the name of the unit.
Address	Enter the physical address of the unit. The physical address value is a number between 00 and FF, and cannot be duplicated.
Model	Enter the model of the unit.
Capacity	Enter the maximum power consumption of the unit.

### Caution: Using unit management function

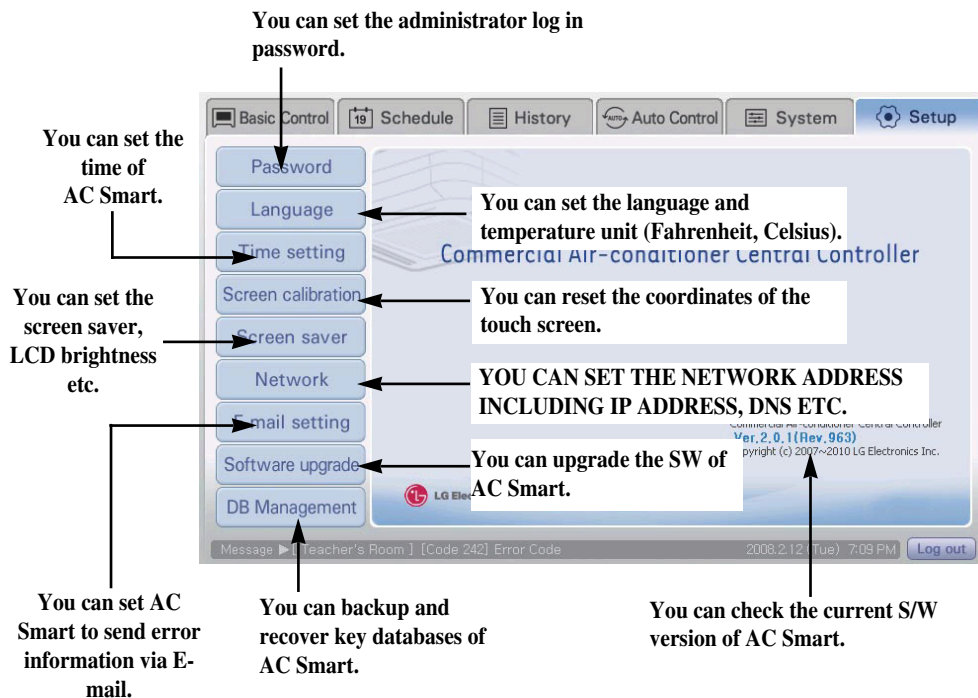


This function is the menu that can be set only by the installation expert during the installation of AC Smart. Note that the general user cannot and must not use this menu to reset the product.

## About environment setting menu

Environment setting menu provides function to set the necessary password and network to use AC smart as well as the screen adjustment function and screen saver function for user convenience.

Environment setting menu is composed of 9 sub menus as shown below in the picture. But for network, E-mail setting, S/W upgrade and DB management menu, you must log in as the installation expert mode for the setting.



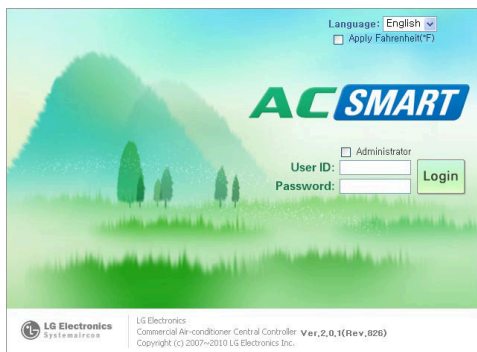
### Caution: Network, E-mail setting, S/W upgrade, DB management



These functions are the menu for the installation expert to set up during the installation of AC Smart. Make sure the general user or administrator does not reset the product by using this menu.

## About web server function

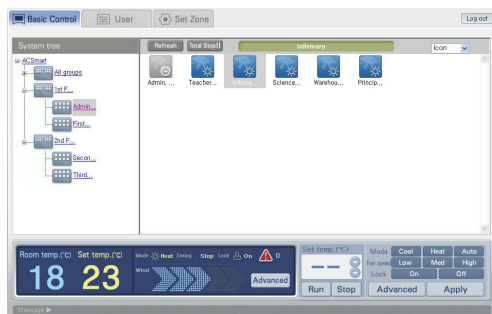
AC Smart provides the web server function so that the user can connect to AC Smart remotely through the network. The administrator can monitor and control the air conditioner from a remote location through this function. To use the web server function, you must set the network information to AC Smart.



### Web server log in

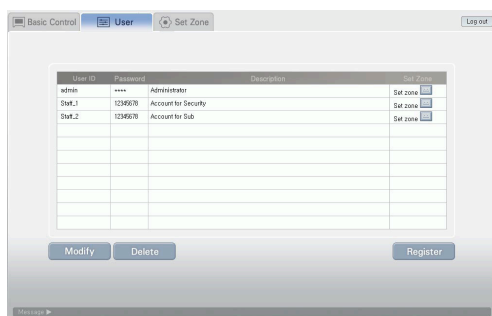
To use the web server function of AC Smart, you must proceed through the log in procedure.

In the log in screen, select the language (Korean, English) and temperature display unit (Celsius, Fahrenheit).



### Control/Monitoring menu

The 'Control/Monitoring' menu is similar to the 'Control/Monitoring' menu of AC Smart. You can view the structure of Zone and Group from this menu. Also you can check the operating status of the air conditioner in Icon or Table format and directly set the temperature and operation.



### User management menu and zone setting menu

From the 'User management' menu, you can assign or delete the authority to other users besides the system administrator to access and control the web server of AC Smart to control the air conditioner.

In the 'Zone setting' menu, you can set the other user besides the system administrator to control only the air conditioners included in the specific Zone.